We claim:

1. An eye tremor monitoring system, comprising:

   a sensor for receiving a signal representing eye tremor; and

   a processor for monitoring eye tremor while receiving said signal.

2. The system of claim 1, wherein the sensor is capable of receiving the signal representing eye tremor through a closed eye lid.

3. The system of claim 1, wherein the sensor comprises a piezoelectric element.

4. The system of claim 1, wherein the processor comprises a filter for selecting an eye tremor signal window.

5. The system of claim 1, wherein the processor comprises a microsaccade filter.

6. The system of claim 1, wherein the processor comprises a self adjusting filter.

7. The system of claim 1, further comprising:

   a wireless transmitter for transmitting the signal representing eye tremor.

8. The system of claim 1, further comprising:

   a controller for generating a signal controlling medication dosage.

9. The system of claim 1, further comprising:

   a controller for generating a control signal for a patient monitoring device.

10. The system of claim 1, wherein the processor comprises a peak counter.

11. The system of claim 1, further comprising:

    a transmitter for transmitting a control signal to a patient monitoring device.

12. The system of claim 1, further comprising:

    a display responsive to said signal.

13. The system of claim 1, further comprising:

a transmitter for transmitting said signal to an information system.

14. The system of claim 1, further comprising:

a wireless transmitter for transmitting a control signal to a patient monitoring device.

15. The system of claim 1, further comprising:

a self-test controller.

16. The system of claim 1, wherein the processor comprises a filter to reduce signal interference from a power supply.

17. The system of claim 1, wherein the processor comprises a filter to reduce the effect of a seismic event.

18. The system of claim 1, wherein the processor comprises:

a seismic event detector, and

a filter controllable by the seismic event detector for reducing the effect of a seismic event.

19. The system of claim 1, wherein the processor comprises a filter to reduce the effect of a seismic event caused by a surgical instrument.

20. The system of claim 1, further comprising:

a forehead-mounted sensor for reducing the effect of a seismic event.

21. The system of claim 1, wherein the processor comprises an amplitude gauge.

22. The system of claim 1, further comprising:

a wireless transmitter for transmitting said signal to an information system.

23.   The system of claim 1, further comprising:

a sensor supporting mount that supports the sensor, wherein the mount includes a second

sensor.

24.   An eye tremor monitoring system, comprising:

a sensor for receiving a signal representing eye tremor;

a hinged sensor mount; and

a processor for monitoring eye tremor while receiving said signal.

25.   A system for classifying a patient's brain stem function using eye tremor, comprising:

a sensor for receiving a signal representing eye tremor;

a processor for comparing said received signal representing eye tremor to at least one

reference value; and

a classifier for classifying the patient's brain stem function using said comparison of said

received signal representing eye tremor to at least one reference value.

26.   The system of claim 25, wherein the classifier further comprises:

a classifier for determining the patient's depth of anesthesia.

27.   The system of claim 25, wherein the classifier further comprises:

a classifier for determining the patient's coma prognosis.

28.   The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from said received signal.

29.   The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from a system that did not

produce said received signal.

30. The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from a signal produced by an electroencephalogram (EEG) monitor.

31. The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from an electroencephalogram (EEG)-based monitor.

32. The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from an electroencephalogram (EEG) index.

33. The system of claim 25, wherein the processor further comprises:

means for determining said at least one reference value from a signal related to auditory evoked potential.

34. The system of claim 25, wherein the classifier further comprises:

means for determining the patient's depth of coma.

35. The system of claim 25, wherein the classifier further comprises:

means for monitoring the patient while in a coma state.

36. The system of claim 25, wherein the classifier further comprises:

means for determining the patient's brain stem viability.

37. The system of claim 25, wherein the classifier further comprises:

means for monitoring motor neuron disease in the patient.

38. The system of claim 25, wherein the classifier further comprises:

means for analyzing the patient's sleep pattern.

39. The system of claim 25 wherein the classifier further comprises:

means for assessing the patient's combat readiness.

40. The system of claim 25 wherein the classifier further comprises:

means for determining when the patient transitions between consciousness and

unconsciousness.

41. A method for classifying a patient's brain stem function using eye tremor, comprising:

receiving a signal representing eye tremor;

comparing said received signal representing eye tremor to at least one reference value;

and

classifying the patient's brain stem function using said comparison of said received

signal representing eye tremor signal to at least one reference value.

42. The method of claim 41, further comprising the step of:

filtering microsaccades.

43. The method of claim 41, further comprising the step of:

selecting an eye tremor signal window.

44. The method of claim 41, further comprising the step of reducing signal interference from

a power supply.

45. The method of claim 41, further comprising the step of reducing signal interference from

ambient noise.

46.   A system for classifying a patient's brain stem function using eye tremor, comprising:

a sensor for receiving a signal representing eye tremor; and

a classifier for classifying the patient's brain stem function by analyzing said received

signal representing eye tremor signal.

47.   A method for monitoring eye tremor, comprising:

taping a hinged sensor mount to a patient's forehead; and

monitoring the patient's eye tremor while an eye tremor sensor mounted to said sensor

mount senses a signal representing eye tremor.

48.   A system for classifying a patient's brain stem function using eye tremor, comprising:

a sensor for receiving a signal representing eye tremor;

a processor for comparing said received signal representing eye tremor to at least one

reference value; and

a classifier for classifying the patient's meditative state using said comparison of said

received signal representing eye tremor to at least one reference value.

49.   An eye tremor monitoring system, comprising:

an eye-mounted sensor for sensing a signal representing eye tremor; and

a processor for monitoring eye tremor while the sensor remains mounted on an eye.

50.   The system of claim 49 further comprising:

a display for displaying the signal representing eye tremor while the sensor remains

mounted on the eye.

51. A system for monitoring an indication of a patient's health using eye tremor, comprising:

a sensor for receiving a signal representing eye tremor;

a processor for comparing said received signal representing eye tremor to at least one reference value; and

a classifier for classifying the patient's health using said comparison of said received signal representing eye tremor to at least one reference value.

52. The system of claim 51, wherein the classifier further comprises:

a Parkinson's disease classifier.

53. The system of claim 51, wherein the classifier further comprises:

an ideopathic Parkinson's disease classifier.

54. The system of claim 51, wherein the classifier further comprises:

a multiple schlerosis classifier.

55. The system of claim 51, wherein the classifier further comprises:

an oculomotor palsy classifier.

56. A system for monitoring a non-electrical physiological signal, comprising:

a sensor for sensing the non-electrical physiological signal; and

a processor for monitoring a physiological phenomenon while sensing said signal.

57. A method for monitoring a non-electrical physiological signal, comprising:

sensing the non-electrical physiological signal; and

monitoring a physiological phenomenon while sensing said signal.

58. An eye tremor monitoring system, comprising:

a sensor for receiving a signal representing eye tremor;

a cupped sensor mount; and

a processor for monitoring eye tremor while receiving said signal.

59. A method for eye tremor monitoring comprising:

receiving a signal representing eye tremor; and

monitoring eye tremor while receiving said signal.

60. A method for eye tremor monitoring comprising:

acquiring an eye tremor signal from a sensor mounted on or near a patient's closed

eyelid;

filtering artifacts from the eye tremor signal while receiving the eye tremor signal;

analyzing the eye tremor signal for an indication of the patient's status, and

displaying the result.

61. An eye tremor monitoring system, comprising:

a sensor for receiving a signal representing eye tremor;

at least one flexure element for maintaining the sensor in contact with a subject's eyelid;

and

a processor for monitoring eye tremor while receiving said signal.

62. An eye tremor monitoring system, comprising:

a sensor for receiving a signal representing eye tremor;

at least one spring element for maintaining the sensor in contact with a subject's eyelid;

and

a processor for monitoring eye tremor while receiving said signal.

63. A method for monitoring eye tremor, comprising:

receiving a signal representing eye tremor through a closed eyelid; and

monitoring eye tremor while receiving said signal.